INSPIRE as an effective tool for e-reporting: the EEA ‘EU Registry on industrial emissions’

INSPIRE and Beyond
Darmstadt 24-05-2018
Not just for INSPIRE’s sake

Long-term objective:

From Member States sending very similar data many times to different EU institutions and bodies

To responsible authorities - at national as well as EU level - harvesting Member States’ well documented, up-to-date, interoperable datasets made accessible through standardised web services.

Ongoing activities concerning the integration and re-use of INSPIRE in the broader framework of government data and services from one side and of EU environmental reporting obligations from the other will turn into

- reduced reporting burden on Member States
- increased availability of up-to-date, consistent, easily discoverable environmental information
INSPIRE and EEA e-reporting data flows: following a pragmatic approach

“Integration”: INSPIRE requirements from multiple data themes are integrated with the specific environmental reporting requirements. This approach underpins the development of the current Air Quality Directive data flow (INSPIRE AU, EF and AM).

“Extension”: a single INSPIRE Theme is extended to include the specific requirements stemming from the reporting. This approach underpins the development of the current EU Registry on Industrial Sites data model.

“Linked Approach”: INSPIRE is re-used “as is”. Environmental data flows contain references to INSPIRE datasets already produced by Member States to fulfil their INSPIRE obligations. The “linked approach” underpins the development of the current data model for the provision of the “Nationally designated areas inventory” (CDDA) 2018.
The EU Registry on industrial sites dataflow collects information on facilities, installations and plants which are obliged to report under the E-PRTR Regulation and the IED (Industrial Emissions Directive). It will be used as a reference dataset for the identification of facilities and large combustion plants in the Integrated E-PRTR and LCP reporting.
INSPIRE - extended schema

Annex F of the INSPIRE General Conceptual Model
EU Registry - streamlined view
structure in which data are to be transmitted from MS to the EEA
Should the EU Registry be considered a first example of how an INSPIREd e-reporting could lead to a significant efficiency and effectiveness gain over the coming years?
complex GML encoding - technological gaps - need for specific organisational and ICT capabilities
BENEFIT n° 1

Same mapping table can be used to map site / facilities / installation/installation parts both towards EuRegistry schema and INSPIRE PF schema.
From DB tables and excels to EU Registry: the mapping table

<table>
<thead>
<tr>
<th>Source Type</th>
<th>Source properties</th>
<th>Target type</th>
<th>Target properties</th>
<th>Relation name</th>
<th>Priority</th>
<th>Cell explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF</td>
<td></td>
<td>ProductionFacility</td>
<td></td>
<td>Join</td>
<td>normal</td>
<td>Joins the types 'PF', 'PF_PI_ID', 'Status' based on the following conditions: 'PF'.status = 'Status'.StatusID</td>
</tr>
</tbody>
</table>
PRO

BENEFIT n° 2

The same transformation project used to obtain the Euregistry dataset for fulfillment of reporting obligation can be re-used with almost no modifications to get the INSPIRE PF dataset for fulfillment of INSPIRE obligation.
From DB tables and excels to EU Registry: the transformation project
BENEFIT n° 3

You can use a simple XSLT transformation to transform the Euregistry gml dataset needed for reporting obligation into the INSPIRE PF gml dataset for the same information.
same data according to INSPIRE PF
The PF dataset obtained following the illustrated methodology, lacks most of the optional fields foreseen in the PF data model. Therefore, though being a valid INSPIRE PF dataset, for a true usability of the dataset, consider adding few steps to the transformation project to take into account those optional fields as well.
It’s a deal!

Providing industrial sites reporting according to an INSPIRE extended schema empowers the Member States to streamline their efforts to fulfil both INSPIRE and e-reporting obligations, since investments in implementing the EU Registry are building on their INSPIRE compliance.
Thank you!

Questions?

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